

ABSTRACT

A fluid matrix comprising cross-linked remodelable collagen from a donor vertebrate animal is useful for regenerating hydrodynamic function in damaged intervertebral discs *in vivo*. The matrix may be injectable and may comprise cells and
5 a plurality of purified cell growth factors. The matrix promotes cell growth and elaboration of proteoglycans to facilitate regeneration of native tissues. The collagen in the matrix may be cross-linked using photooxidative catalysis and visible light, and purified cell growth factors are preferably at least partly bone-derived.